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Colored Concrete For Your Home

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COLORED CONCRETE FOR YOUR HOME

With a minimum amount of skill and patience with a trowel homeowners can add color to concrete. Three methods are available: the sprinkle-on method, the topping method, and the entire thickness method.

by W. Forrest Bear and Thomas A. Hoerner

COLORED concrete offers homeowners a change from conventional cement in their walks and patios.

It is one way that you can add color to the neutral gray of sidewalks. But as in all additions of color to landscapes, colored concrete can add or detract from the landscape. The addition must be handled with an eye to all other already existing design elements, such as trees, plantings, and house.

If you decide to try colored concrete, there are three different methods of coloring concrete available to choose from — varying in cost and skill required.

One of these methods should adapt easily to your needs. By following these directions you can have colored concrete with a minimum amount of skill and patience with a trowel.

Choosing A Method . . .

Sprinkle-On-Method: This is the least expensive method. But it requires the greatest amount of skill and patience to obtain a uniform coloring.

The sprinkle-on method is most popular when the more expensive pigments, such as blue and green, are chosen for the job. This method gives only a thin layer of color. To obtain more vivid and truer colors, use white portland cement rather than gray.

First, mix the concrete, and cast into forms. Then level off the concrete even with the forms. Mix 8 pounds of coloring pigment with an equal weight of cement. This amount will color 100-125 square feet of surface area. Adding cement to the pigment helps the pigment adhere to the surface particles even though moisture still is being worked from the concrete.

Sprinkle half of this mixture uniformly over the surface. Work the surface with a wood float until the color is evenly worked into the surface.

When the excess water is gone from the surface, sprinkle the remainder of the colored pigment mixture on the top. The color is then steel-troweled into the surface, and the surface can be finished with the steel trowel or a wood float.

Uneven sprinkling or improper troweling may cause streaking. Trowel in one direction. Don't overwork the surface in troweling. This causes the finer particles to be drawn to the surface and reduces the wearing qualities.

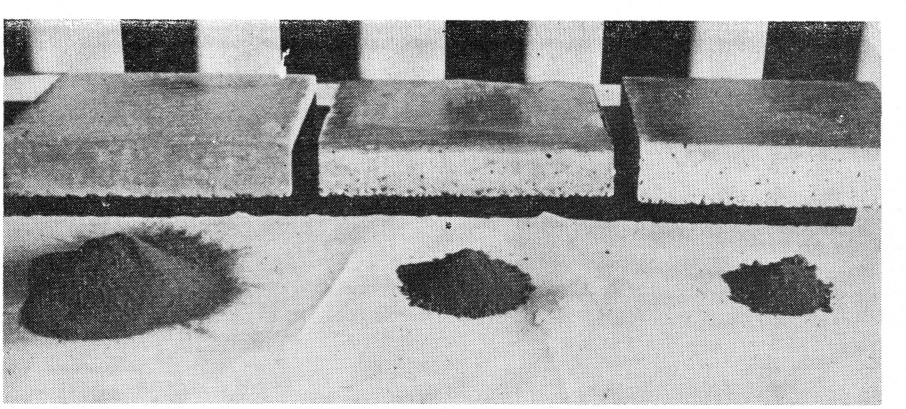
Topping: This method is more expensive than the sprinkle-on method, but a top quality job is easier to obtain. Also, the topping method results in a thicker, longer wearing and more uniformly colored layer.

With the topping method, regular concrete mix is cast into forms but then is leveled off ½ inch from the top of the form. The mix is worked along the edges and wood floated. This causes water to come to the surface. When this excess water evaporates, spread the colored topping mixture on the surface.

A mix for color topping 50 square feet can be prepared by combining the following: 8 pounds of pigment, one 94-pound bag of cement, 200 pounds of sand, and 5 gallons of water. Use a very stiff mix. Trowel the topping and finish the surface with a steel trowel or wood float. White portland cement will result in bright colors.

Entire Thickness: This is the easiest method, but it is also the most expensive because of pigment costs. Therefore, red, which is one of the least expensive pigments, is often applied this way. Although the entire thickness method is the most expensive method, it is the easiest to cast and to finish.

With this method the coloring pigment is mixed throughout the entire mass of concrete. This way a uniform color is obtained, insuring a long life. Use the coloring pig-



These patio blocks illustrate the three methods. From left to right: entire thickness method; topping method; and sprinkle-on method. Amounts of pigments for coloring one square foot are shown for comparison.

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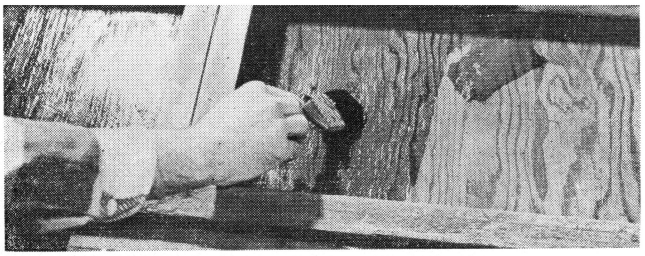
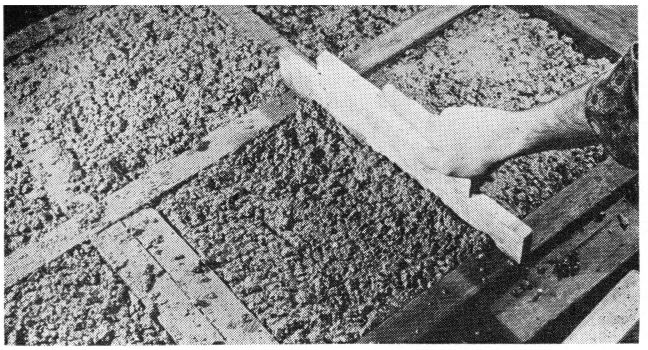
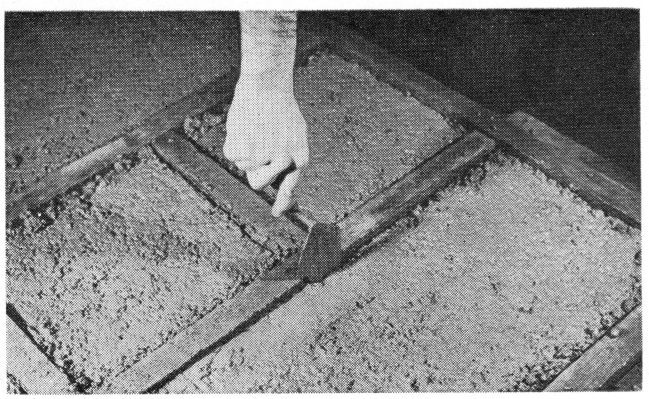


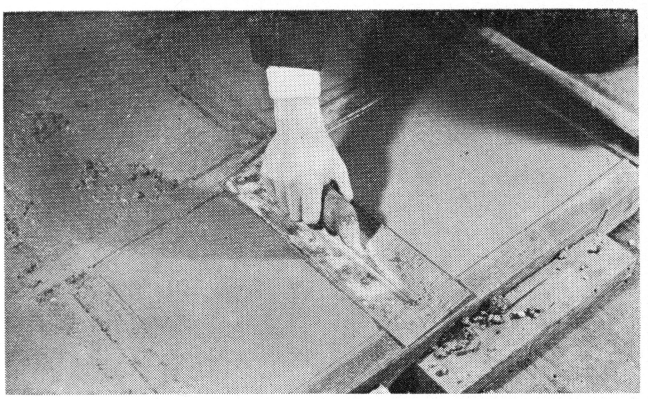
Careful preparation of forms is an important part of the work. Here oil is being added to prevent sticking of concrete.



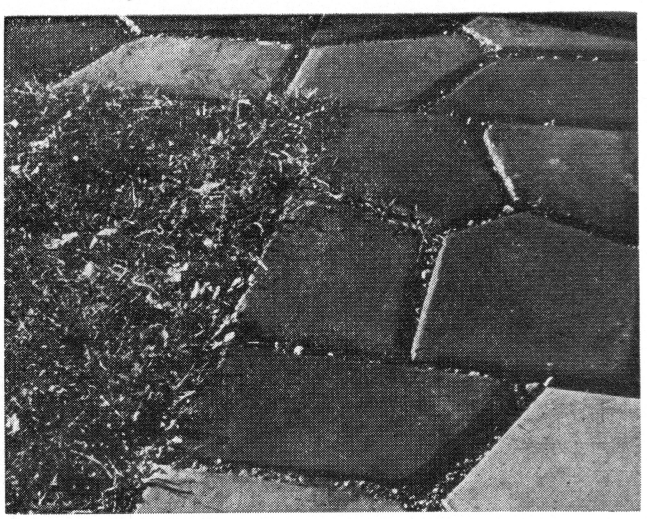
Once a concrete mixture is in the forms, excess concrete is leveled off in preparation for one of the two topping methods.



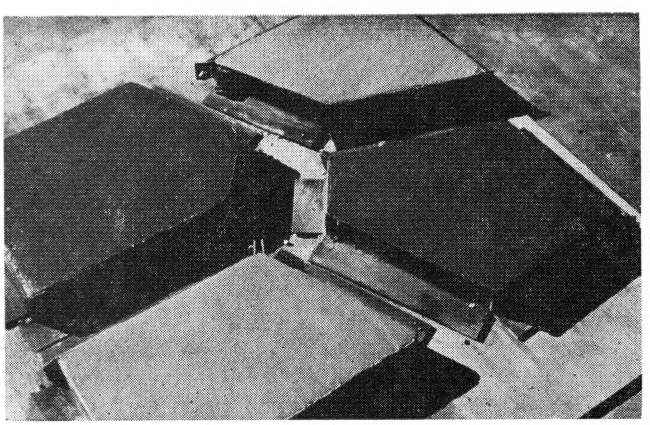
Above, spading is being done to push large aggregate to the center and bring small aggregate to the outside for a smooth surface.



Troweling to produce the desired finish takes patience and skill.



A level sand or gravel base should be prepared with sand or gravel between the flagstones also.



Frames of angle iron can also be used for casting flagstones in the desired shapes.

ment at the ratio of 8 pounds to each 94-pound bag of cement used in the total mix.

Finishing . . .

The finish depends mainly on the appearance you want and on the use of surface. A steel-trowel finish, for example, produces a dense, smooth surface. A wood float produces a coarser and more nonskid finish — preferable for outside patios and walks. For a still rougher and more nonskid surface, use a coarse stiff-bristled broom following the final wood floating.

Choosing Pigment . . .

What characteristics are desirable in a pigment for making colored concrete? First, it should be easy to apply, resistant to sun and water fading, and resistant to alkalies. Second, the pigment should not produce a harmful chemical reaction. And third, it should be relatively inexpensive and should produce a uniform desired color.

The pigments available are either organic or inorganic. Two kinds of inorganic pigments are available — the natural oxides and manufactured pigments. Manufactured pigments produce the more intense colors but are the more expensive. The natural oxide pigments produce duller colors but are less expensive.

Study and ask about pigment qualities before making your selection and keep the desirable characteristics in mind. Good-quality concrete pigments will cost about as follows: red, tan, chocolate brown and yellow, 35 cents a pound; black 45 cents a pound; blue, 65 cents a pound; green, $1.05 a pound.

Pigments costing less than these may produce colors that are dull which may fade out entirely over a short period of time.